

WHAT IS CLAIMED IS:

1. An arylamine compound of the formula:



wherein,

Ar independently each occurrence is a group comprising one or more divalent aromatic groups, and optionally two Ar groups separated by a single NX group may be joined together by a second covalent bond or by a bridging group, thereby forming a fused multiple ring system;

X is an inert substituent or a cross-linkable group, with the proviso that in at least one occurrence in said compound, X is a crosslinkable group;

Z independently each occurrence is hydrogen or a leaving group,

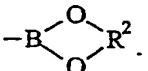
n is 1 or 2; and

n' is 0, 1 or 2.

2. A compound according to claim 1 wherein X in at least one occurrence is a moiety containing a double bond, a triple bond, a precursor capable of in situ formation of a double bond, or a heterocyclic, addition polymerizable group.

3. A compound according to claim 1 wherein X in at least one occurrence is selected from the group consisting of benzocyclobutanyl groups and substituted C₆₋₁₂ arylene groups containing one or more substituents selected from the group consisting of benzocyclobutane, azide, oxirane, di(hydrocarbyl)amino, cyanate ester, hydroxy, glycidyl ether, C₁₋₄ alkylacrylate, C₁₋₄ alkylmethacrylate, ethenyl, ethenyloxy, perfluoroethenyloxy, ethynyl, maleimide, nadimide, tri(C₁₋₄)-alkylsiloxo, tri(C₁₋₄)-alkylsilyl, and halogenated derivatives thereof.

4. A compound according to claim 1 wherein X in at least one occurrence is 1-benzo-3,4-cyclobutane or 4-phenyl-1-(benzo-3,4-cyclobutane).

5. A compound according to claim 1 wherein Z each occurrence is halo, cyano, triflate, azide, -B(OR¹)₂, or .

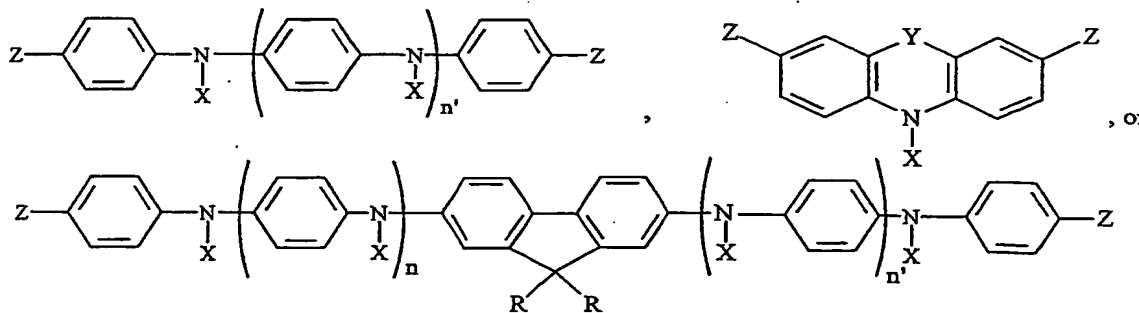
wherein R¹, independently in each occurrence, is hydrogen or a C₁₋₁₀ alkyl group, and R², independently each occurrence, is a C₂₋₁₀ alkylene group.

6. A compound according to claim 1 wherein Ar each occurrence is phenylene, 9,9-di(C₁₋₂₀alkyl)fluorenyl, or a combination thereof; X is 3,4-benzocyclobutan-1-yl, ethenyl or p-ethenylphenyl; Z is bromine or hydrogen; n is 1 or 2; and n' is 0 or 1.

7. A compound according to claim 6 wherein Ar each occurrence is phenylene; each X group is 3,4-benzocyclobutan-1-yl; Z each occurrence is bromine; n is 1 or 2; and n' is 0.

8. A compound according to claim 7 wherein n is 1.

9. A compound according to claim 1 having the formula:



wherein Y is a covalent bond, O, S or NR; where

R independently each occurrence is i) hydrogen; ii) halogen; iii) a C₁₋₂₀ hydrocarbyl group; iv) a hydrocarbyl group substituted with one or more heteroatom containing groups containing up to 20 atoms not counting hydrogen and wherein the heteroatom is selected from S, N, O, P, B or Si; v) a halogenated derivative of iii) or iv); or vi) a substituted derivative of iii) or iv) wherein the substituent is a crosslinkable X group; and

n, n', X, and Z are as previously defined in claim 1.

10. An oligomer or polymer having one or more repeating groups of the formula:



where X' is X or a divalent crosslinked remnant formed by addition polymerization of a crosslinkable X group;

Z' is Z, a covalent bond, or a terminal group formed by replacement or reaction of a leaving group;

Ar independently each occurrence is a divalent aromatic group, and optionally two Ar groups separated by a single NX group may be joined together by a second covalent bond or by a bridging group, thereby forming a fused multiple ring system;

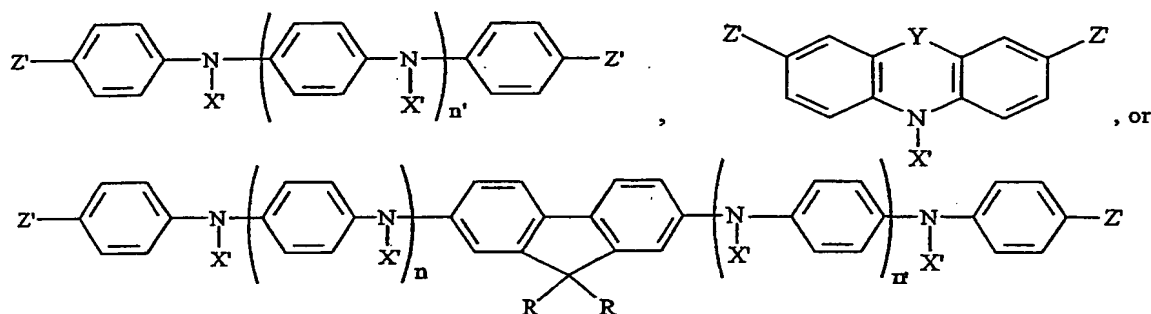
X is an inert substituent, with the proviso that in at least one occurrence in said compound, X is a crosslinkable group;

Z independently each occurrence is hydrogen or a leaving group,

n is 1 or 2; and

n' is 0, 1 or 2.

11. An oligomer or polymer according to claim 10 having one or more repeating groups Ia) of the formula:



where X' is X or a divalent crosslinked remnant formed by addition polymerization of a crosslinkable X group;

X is an inert substituent or a group capable of forming crosslinking functionality;

Y is O, S or NR';

R independently each occurrence is i) hydrogen; ii) halogen; iii) a C₁₋₂₀ hydrocarbyl group; iv) a hydrocarbyl group substituted with one or more heteroatom containing groups containing up to 20 atoms not counting hydrogen and wherein the heteroatom is selected from S, N, O, P, B or Si; v) a halogenated derivative of iii) or iv); or vi) a substituted derivative of iii) or iv) wherein the substituent is a crosslinkable X group;

Z' is Z, a covalent bond or a terminal group formed by replacement or reaction of a leaving group;

n is 1 or 2; and

n' is 0, 1 or 2.

12. A crosslinked polymer according to claim 10 or 11 wherein X' in at least one occurrence is a divalent crosslinked remnant formed by addition polymerization of a crosslinkable X group.

13. A crosslinked polymer according to claim 12, wherein X' comprises conjugated unsaturation.

14. A process for preparing oligomers or polymers according to claim 10, which
5 comprises heating a composition comprising a compound according to claim 1 under reaction conditions sufficient to form an oligomer or polymer.

15. A film comprising one or more of the oligomers or polymers according to claim
10 or preparable according to claim 14.

16. An electronic device comprising one or more layers of polymer films, at least one
of which comprises a film according to claim 15.